

**SCHEMATIC DIAGRAMS
FOR
AVIONICS INTERMEDIATE COURSE
CLASS C7
C-100-2012**

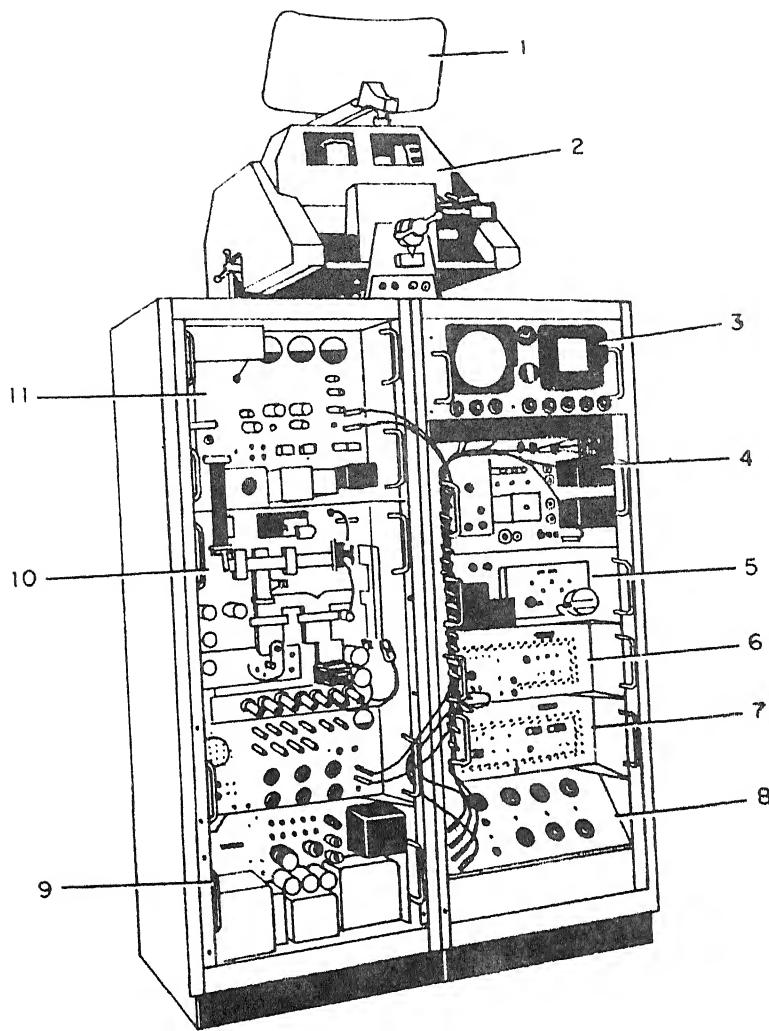
**UNIT XII
AIRBORNE RADAR SYSTEM TRAINING
DEVICE 11D13
CNTT-M1620
PREPARED BY
NAVAL AIR TECHNICAL TRAINING CENTER
NAVAL AIR STATION MEMPHIS
MILLINGTON, TENNESSEE**

**PREPARED FOR
CHIEF OF NAVAL TECHNICAL TRAINING**

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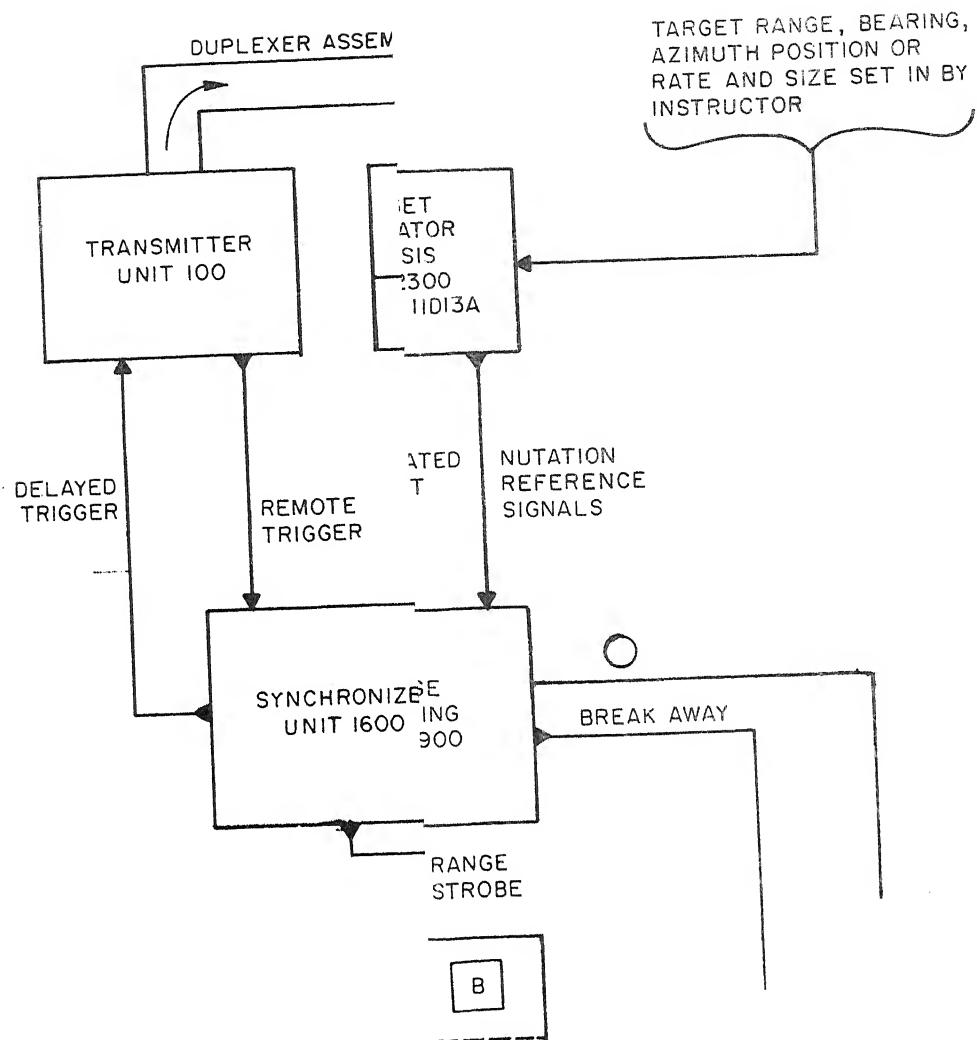
- 1. ANTENNA UNIT 850
- 2. ANTENNA STABILIZATION PLATFORM UNIT 1000
- 3. INDICATOR DISPLAY UNIT 1500
- 4. INDICATOR VIDEO UNIT 1400
- 5. ANTENNA CONTROL GROUP UNIT 1800
- 6. SYNCHRONIZER UNIT 600
- 7. RANGE TRACKING UNIT 1900
- 8. TARGET GENERATOR UNIT 2300
- 9. INDICATOR POWER SUPPLY UNIT 700
- 10. RECEIVER/DUPLEXER UNITS
200/300/900
- 11. TRANSMITTER UNIT 100

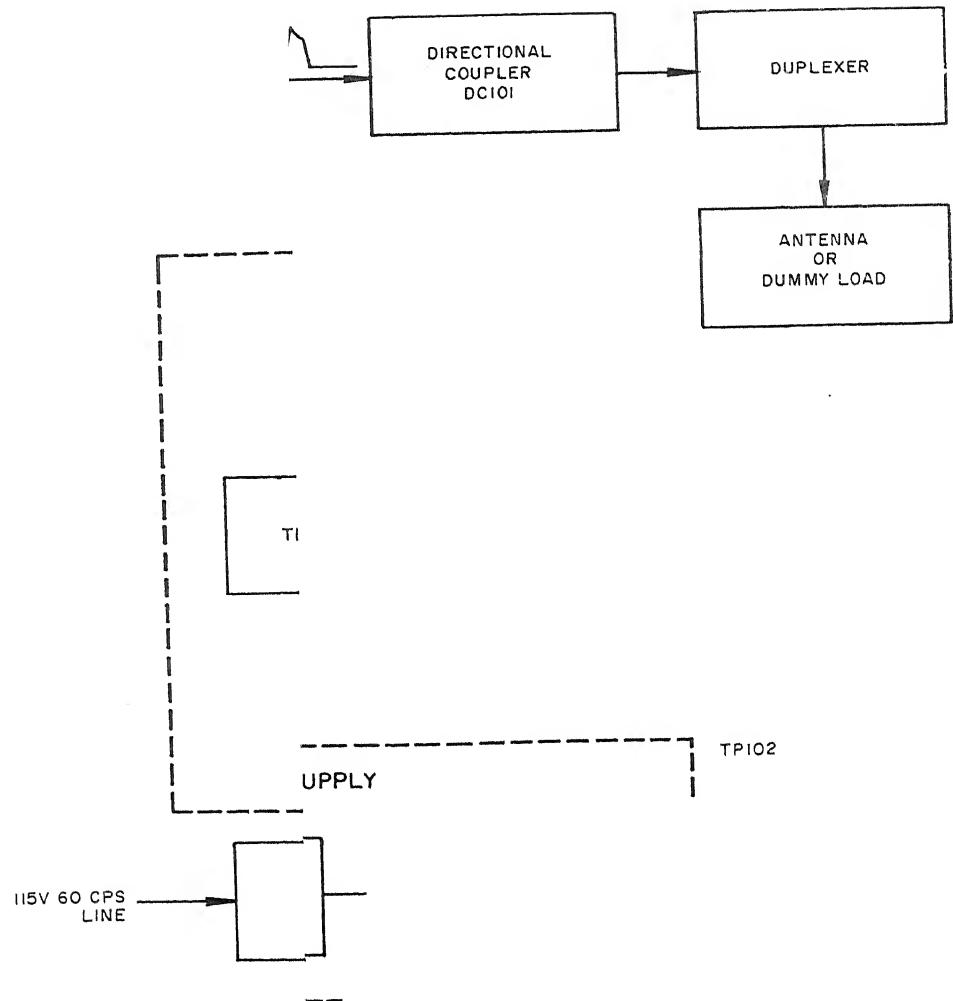
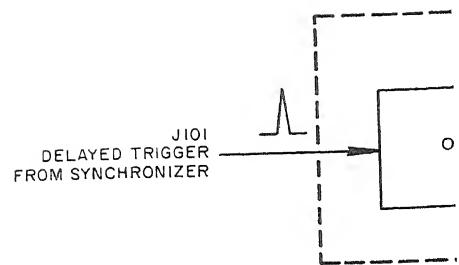
BASIC FIRE CONTROL RADAR MAINTENANCE TRAINING SET,
DEVICE 11D13A

Figure 1.

NOTES

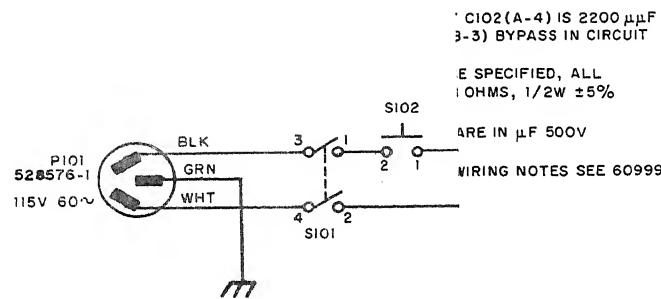
1. Unless otherwise noted, all cables are double-ended and are listed twice to facilitate location from either end.
2. Double asterisk(**) indicates triple branch cable. Each branch is listed twice to facilitate location from any end.
3. Dagger (†) indicates roll-back cable which is part of harness of unit indicated. Roll-back cables are listed once under the cable grouping for the associated major unit.
4. Refer to Figure 4-3 for relative location and routing of cables. Solid line indicates cable path in front of consoles, dashed line indicates cable path behind consoles. J1 at bottom of main console is a feed-through connector. Roll-back cables A1301-P1 through A1320-P1 and A1501-P1 through A1520-P1 (not shown) connect from individual modules to adjacent unit receptacle as listed.
5. J104 is power test jack in direct coupler DC101.
6. Unit power line rail assembly
7. Connects antenna horn.
8. Bonding strap, to transmit
9. High voltage rarely from on indicator (CRT).
10. Receptacles i utilize a t adapter to tel-connect tacle.
11. Roll-back cables dangling



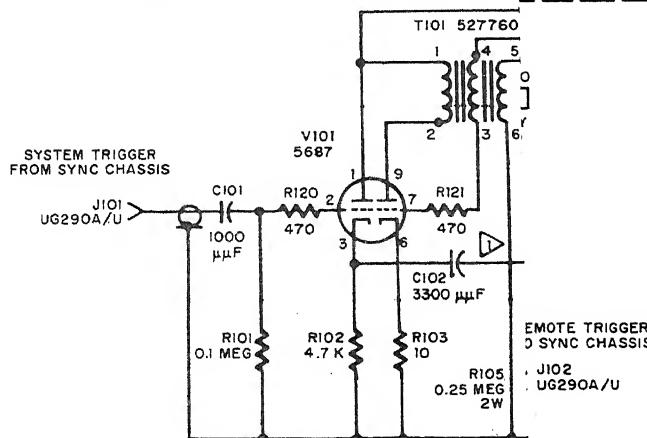


A

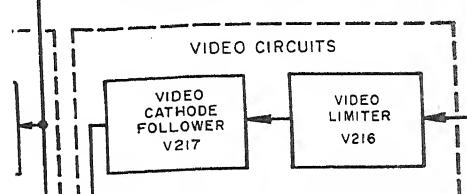
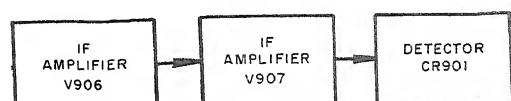
B



C



D



VIDEO TO INDICATOR CHASSIS

DOPPLER CIRCUIT



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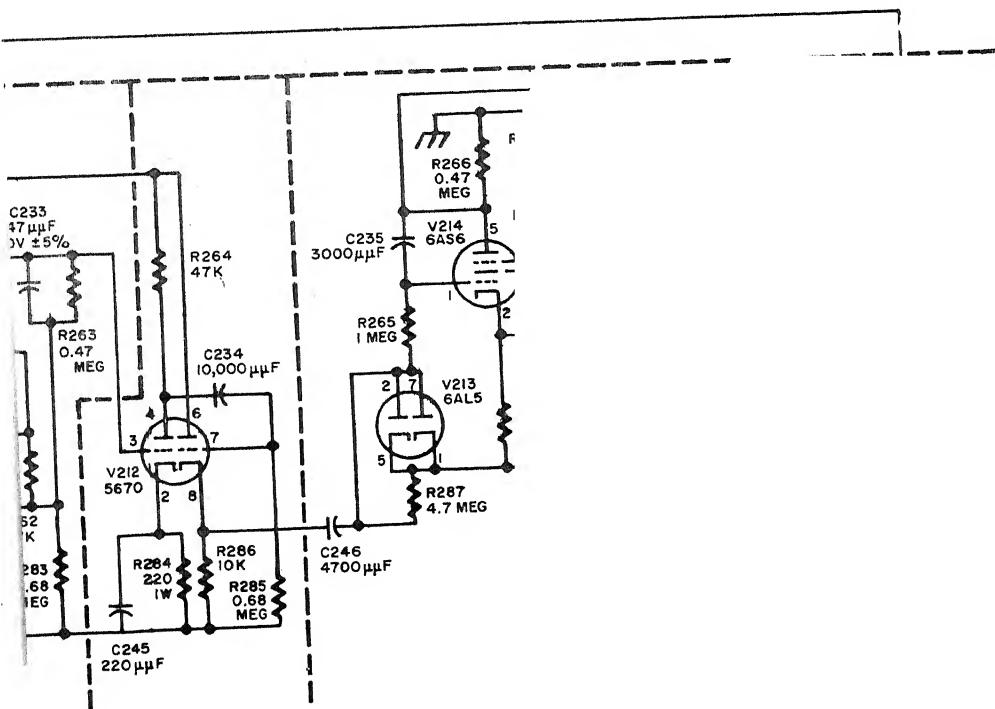
ALL RESISTORS ARE IN OHMS 1/2W $\pm 5\%$

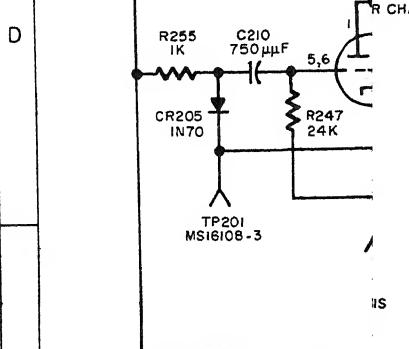
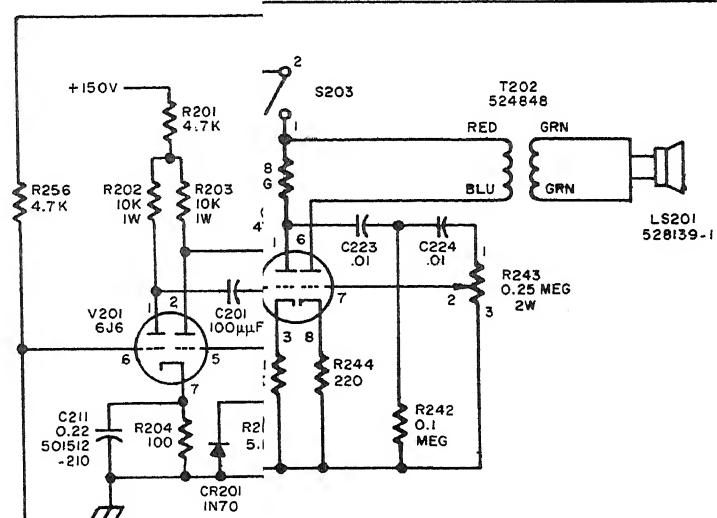
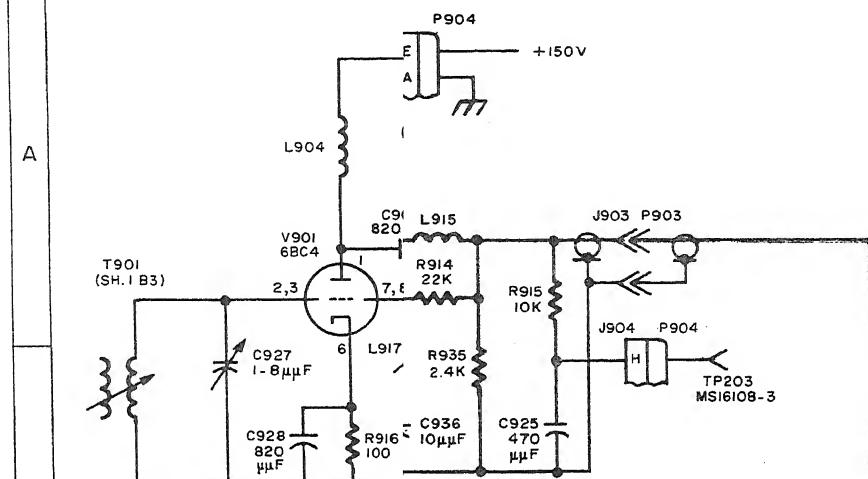
ALL CAPACITORS ARE IN μF 400V $\pm 10\%$

CAPACITORS IN μMF ARE 500V $\pm 5\%$

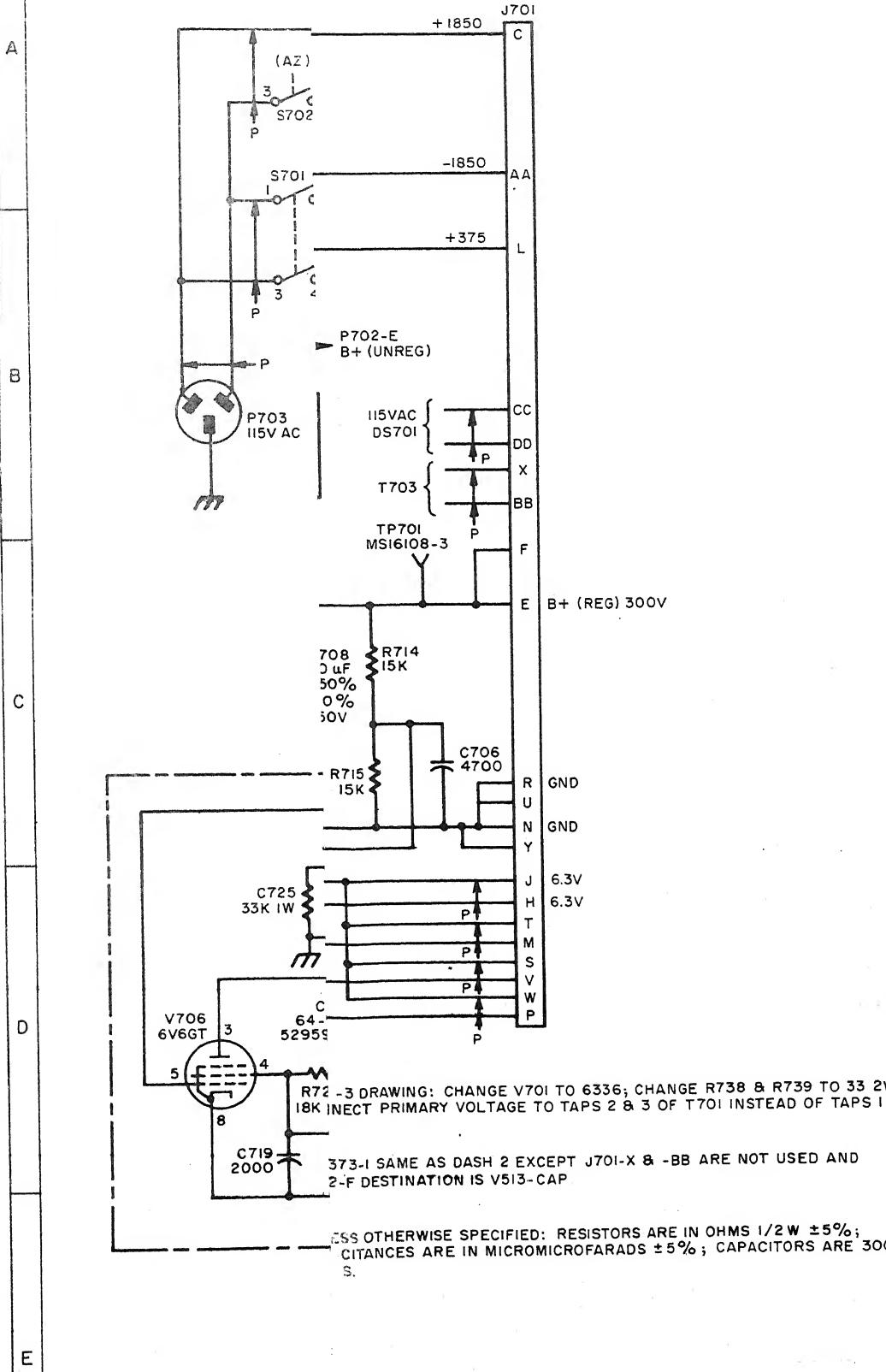
► THESE CAPACITORS ARE 600V (529746-1)

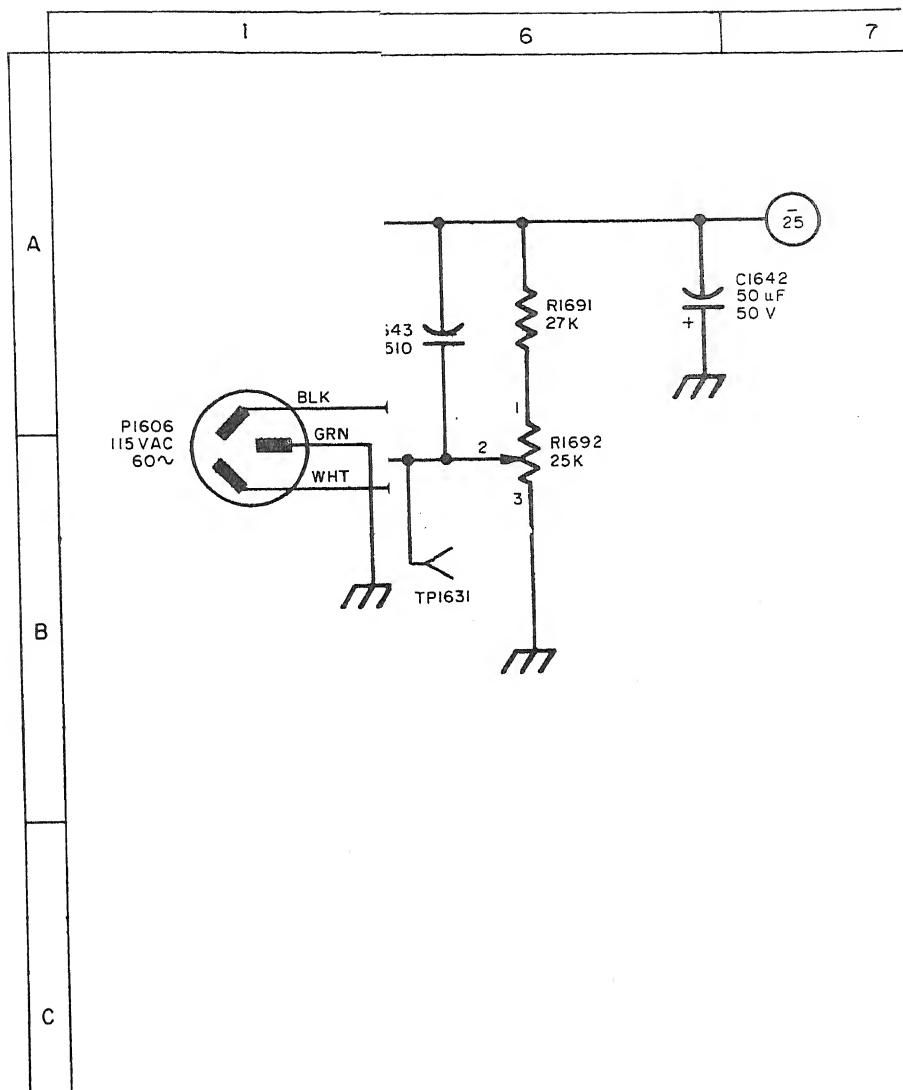
FOR ADDITIONAL WIRING NOTES SEE 60999

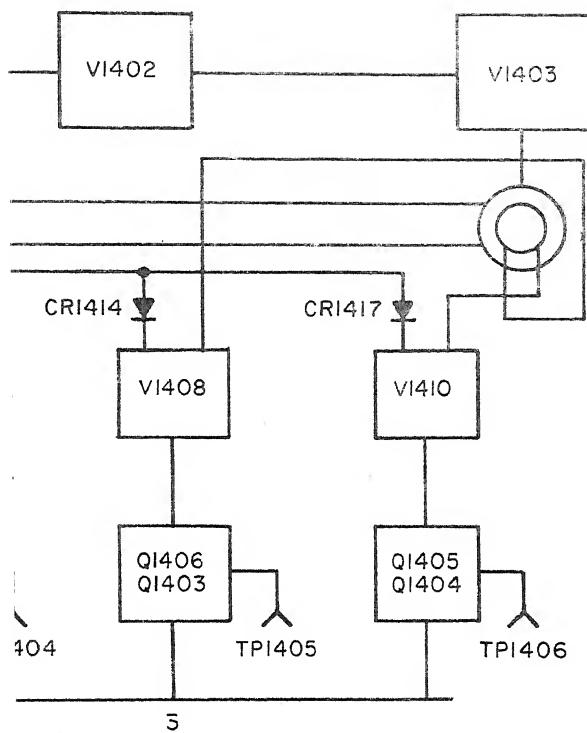
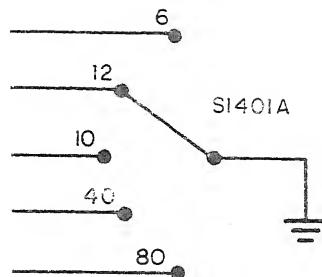




E







Deflection, Unblanking and
Block Diagram



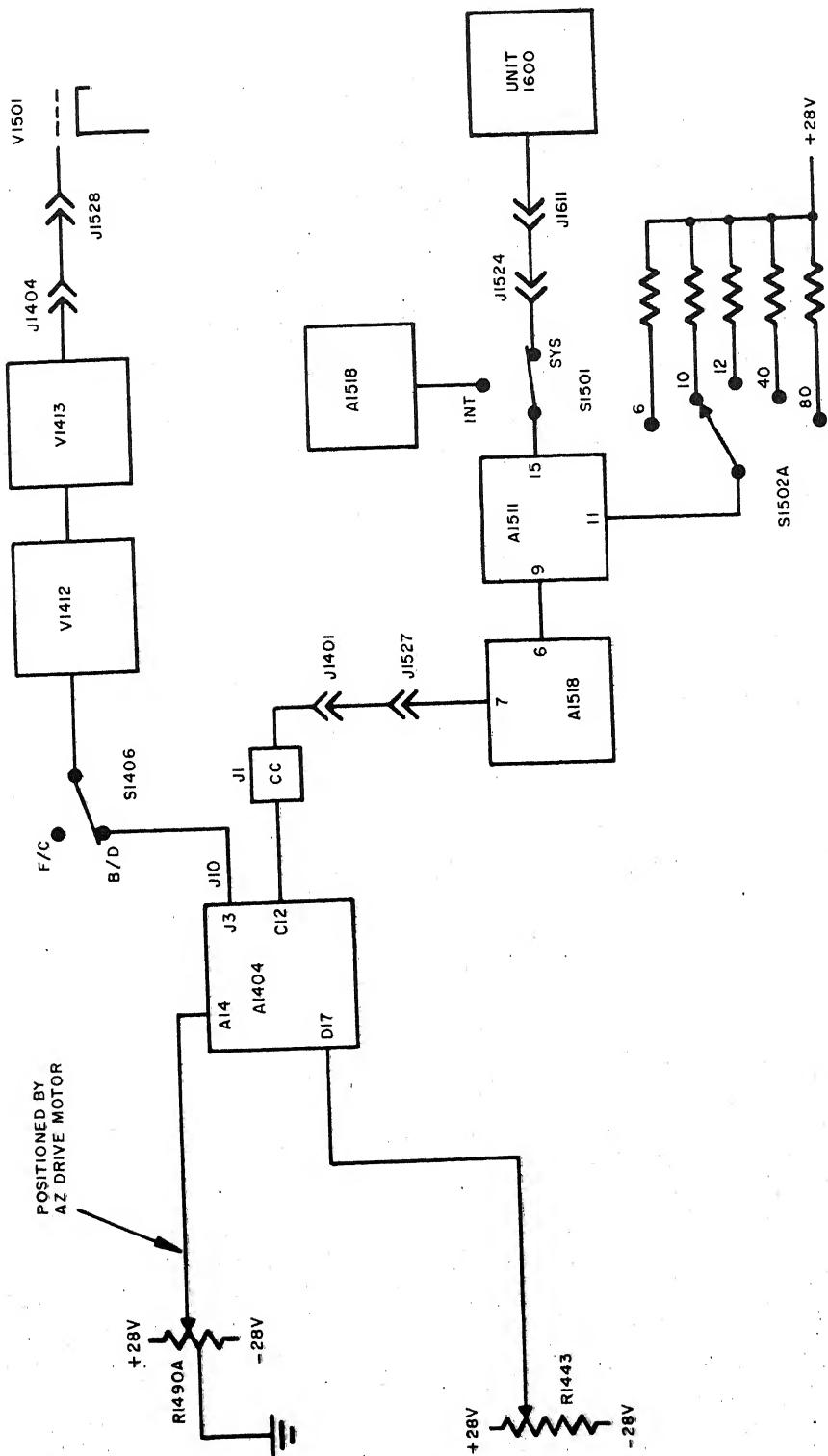
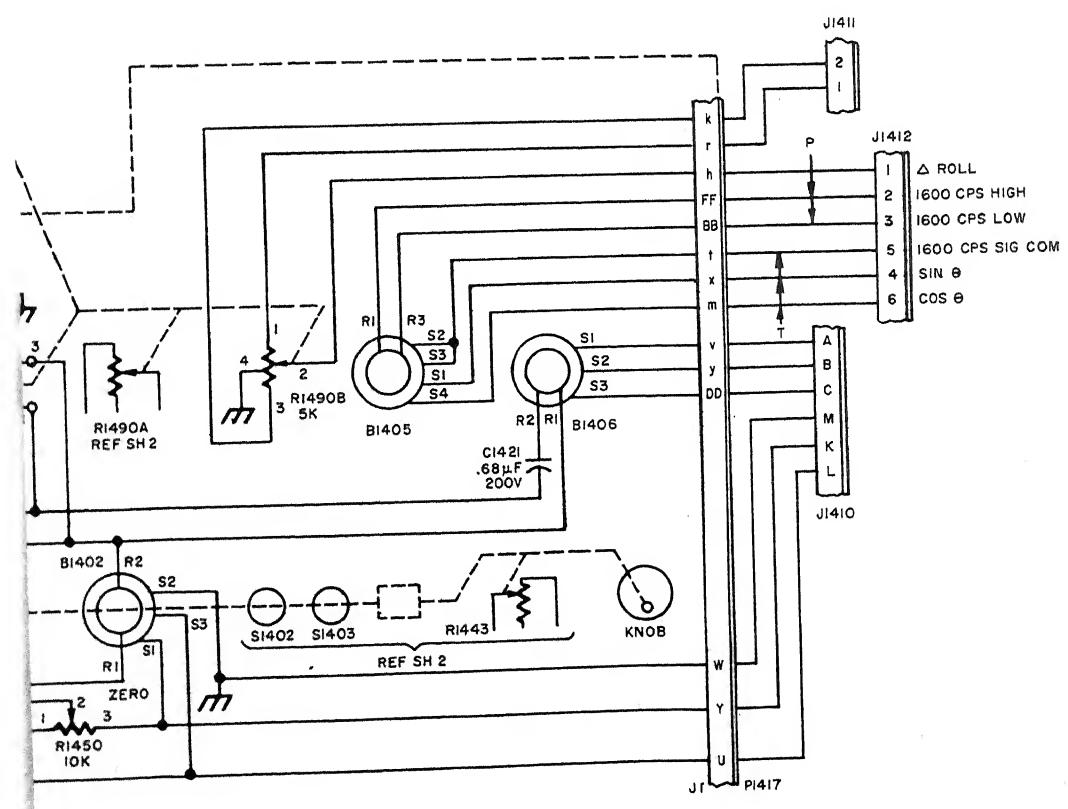
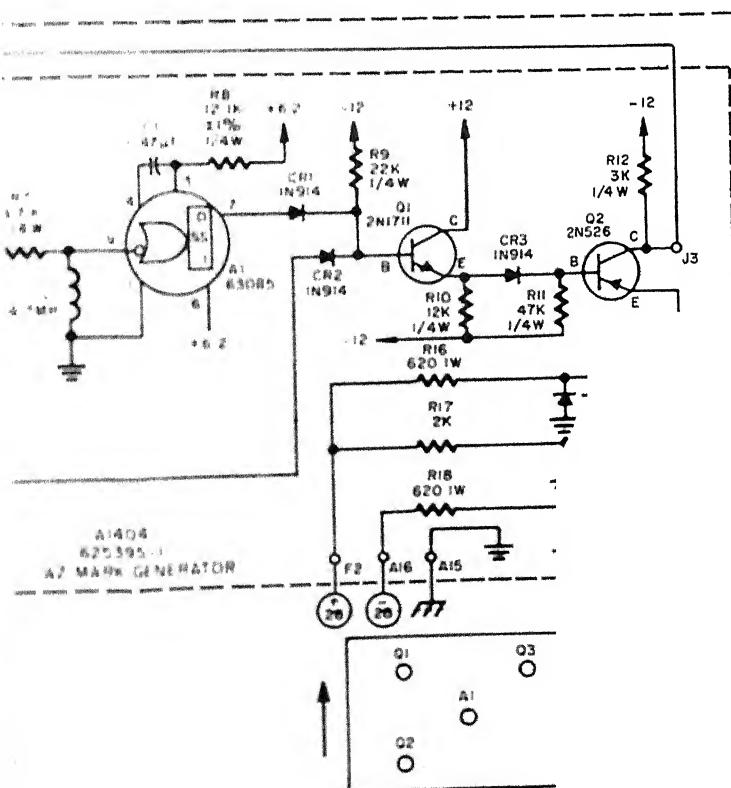
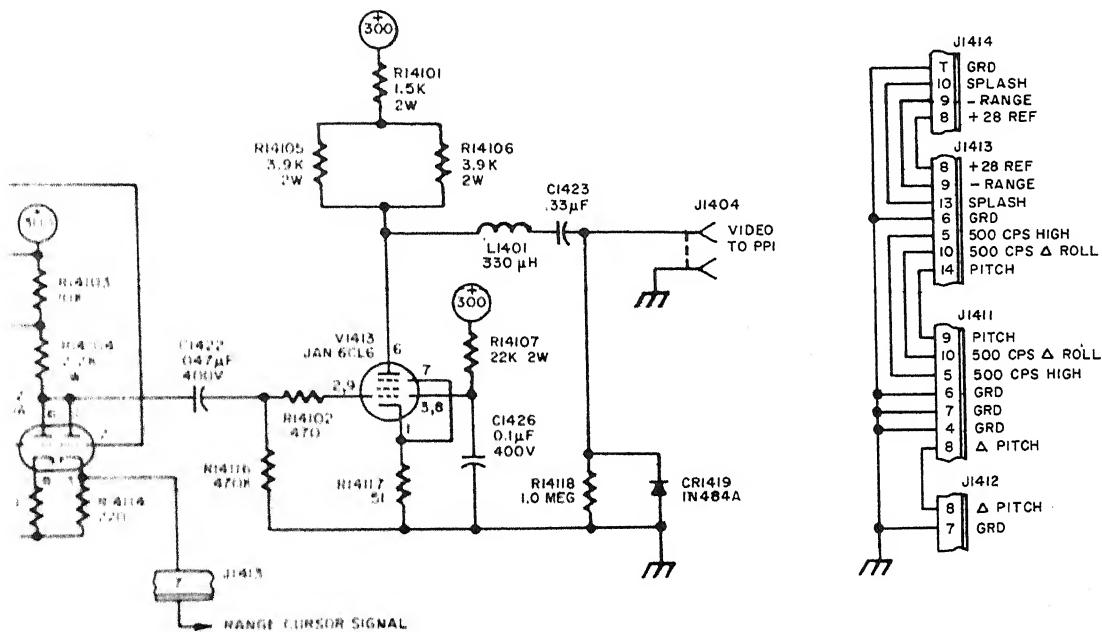
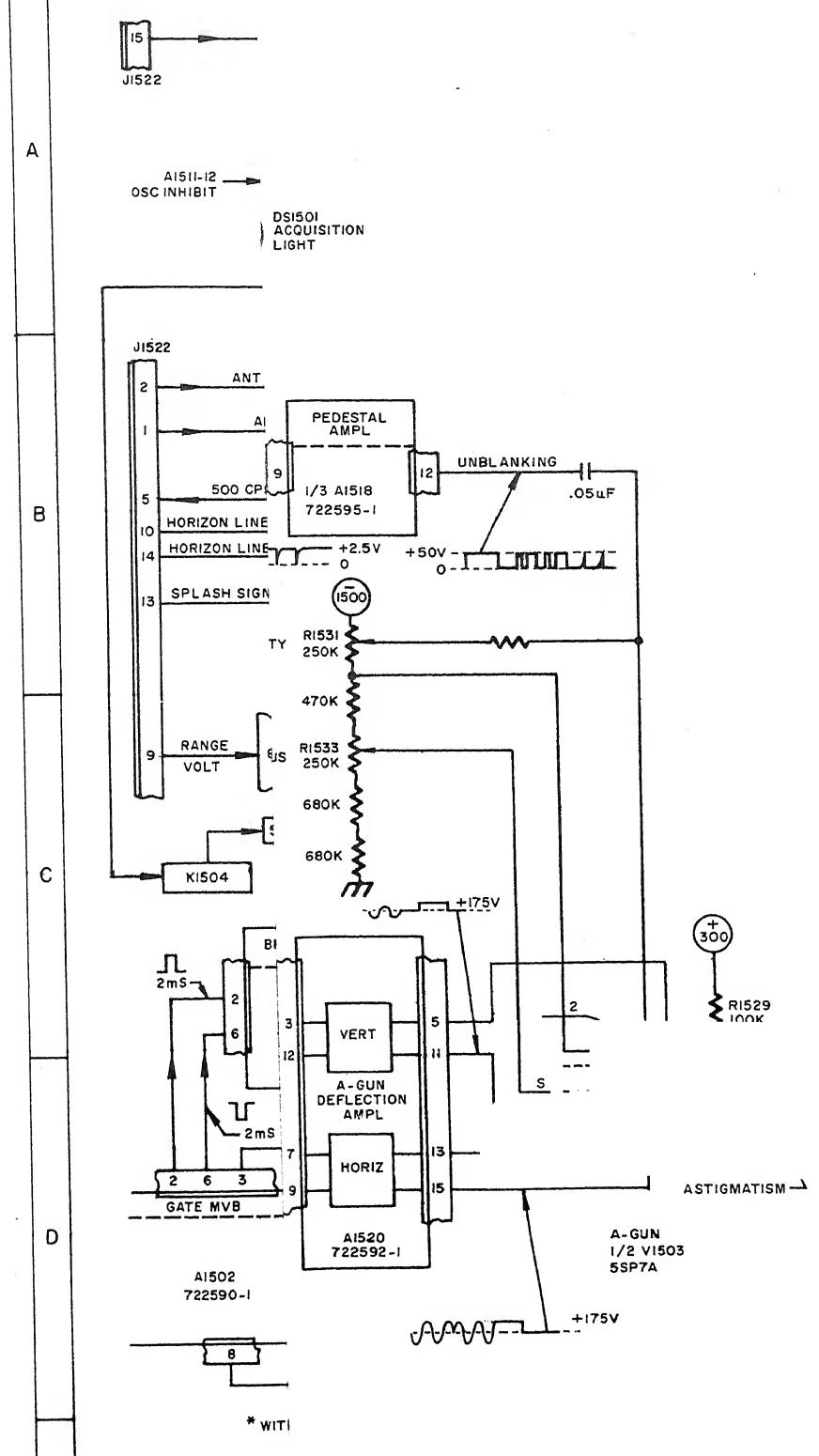


Figure 12. Azimuth Marker Block Diagram



2 (D5)	2 (A3)	2 (D2)	2 (B2)	2 (B3)
2 (D3)	2 (A3)	2 (D3)	2 (B3)	2 (B3)
2 (D4)	2 (D4)	2 (B4)	1 (D9)	1 (D10)
2 (D4)	1 (A2)	1 (D2)	1 (D3)	2 (B4)
(14-15-16)	(5-6-7)	(8-9-10)	(11-12-13)	(14-15-16)





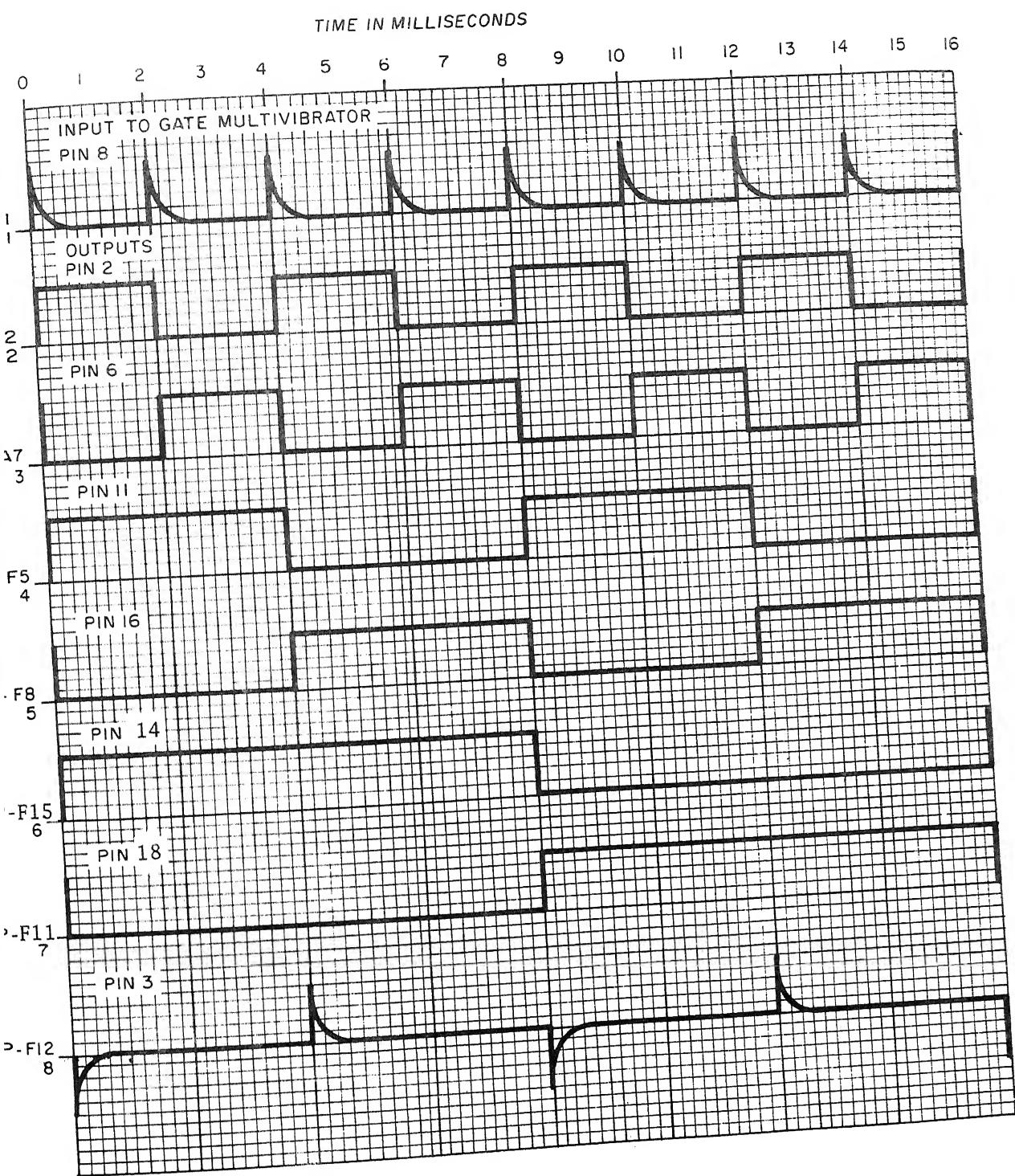
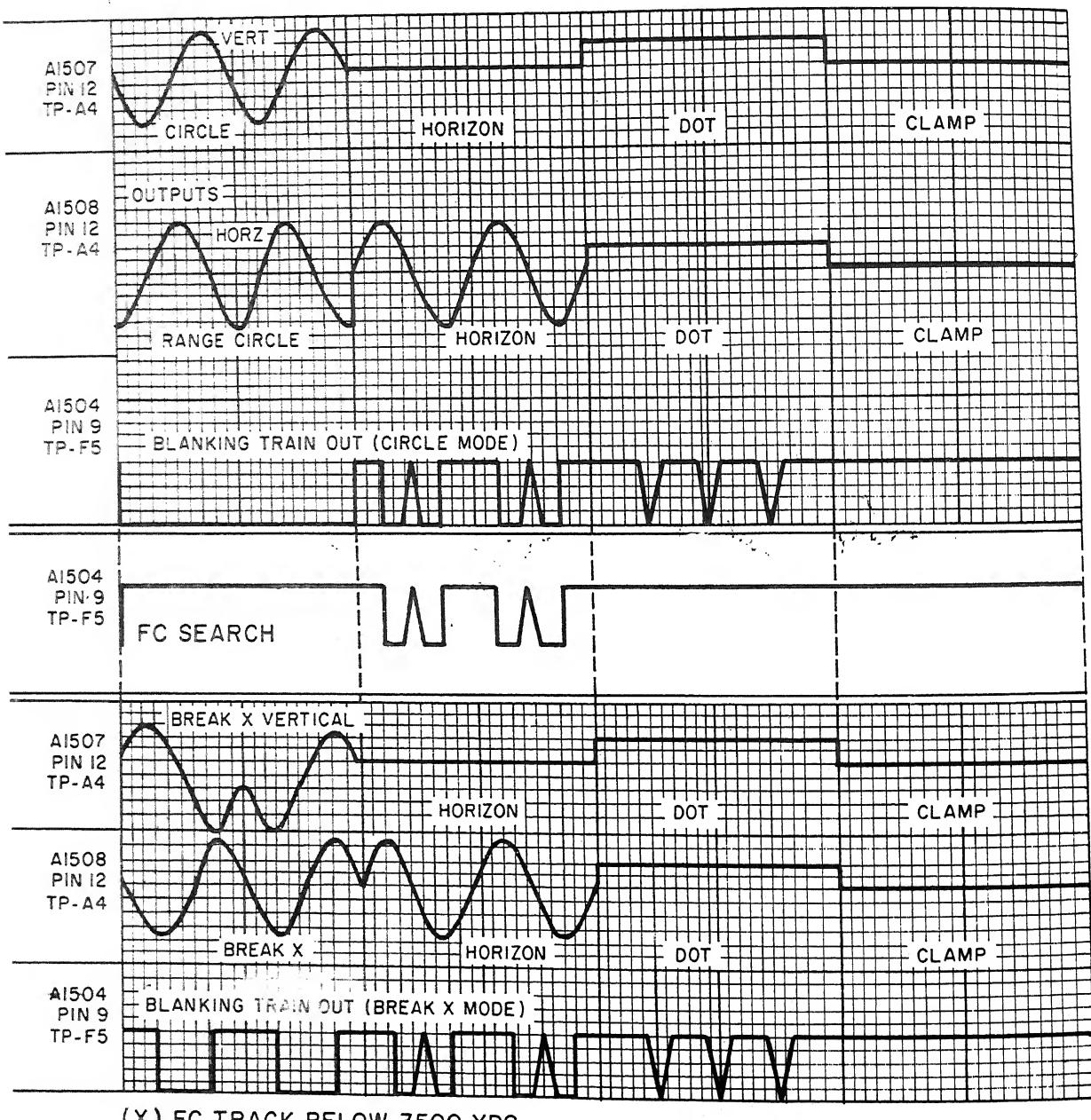


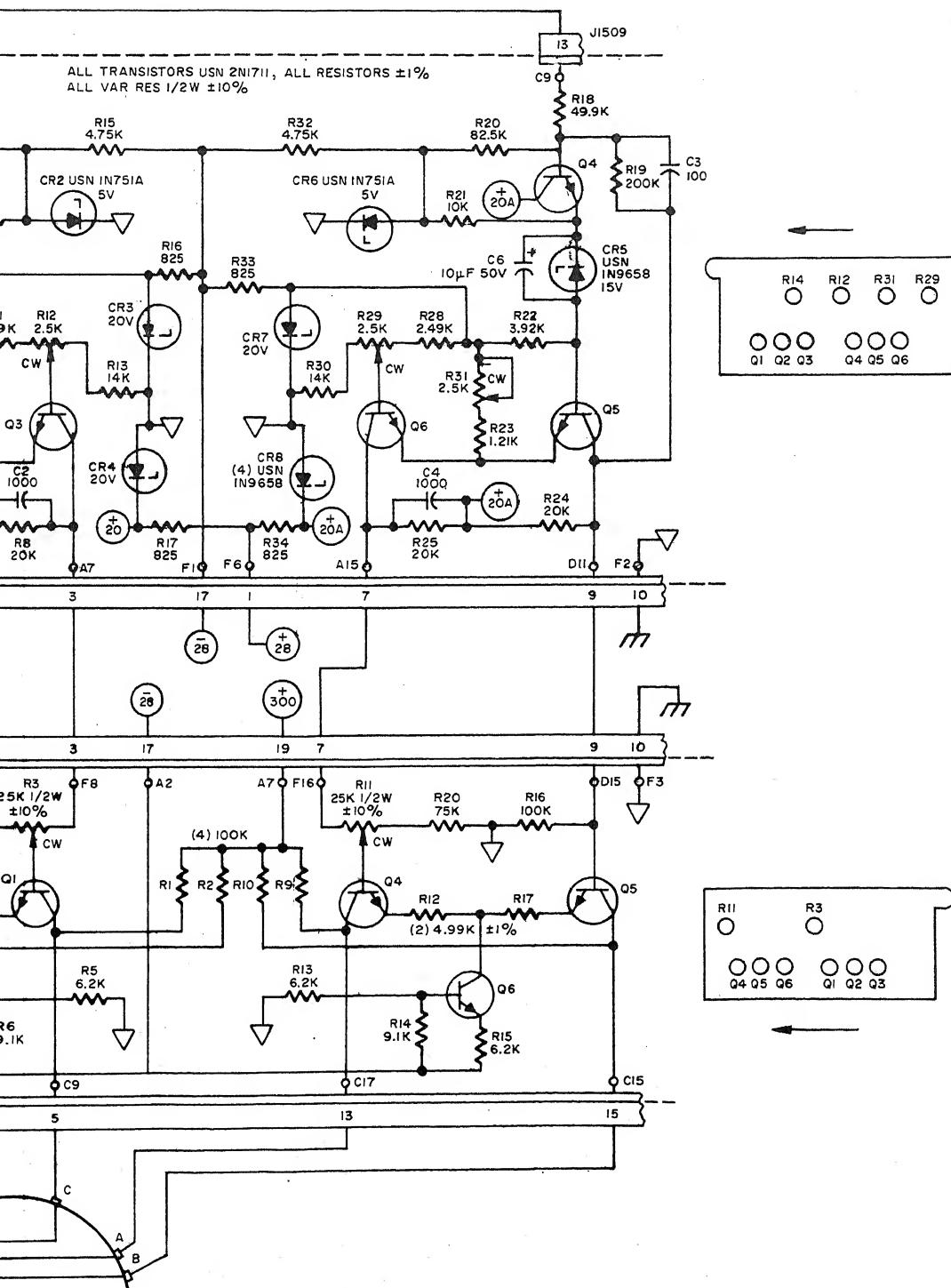
Figure 15. Gate Multivibrator A1502

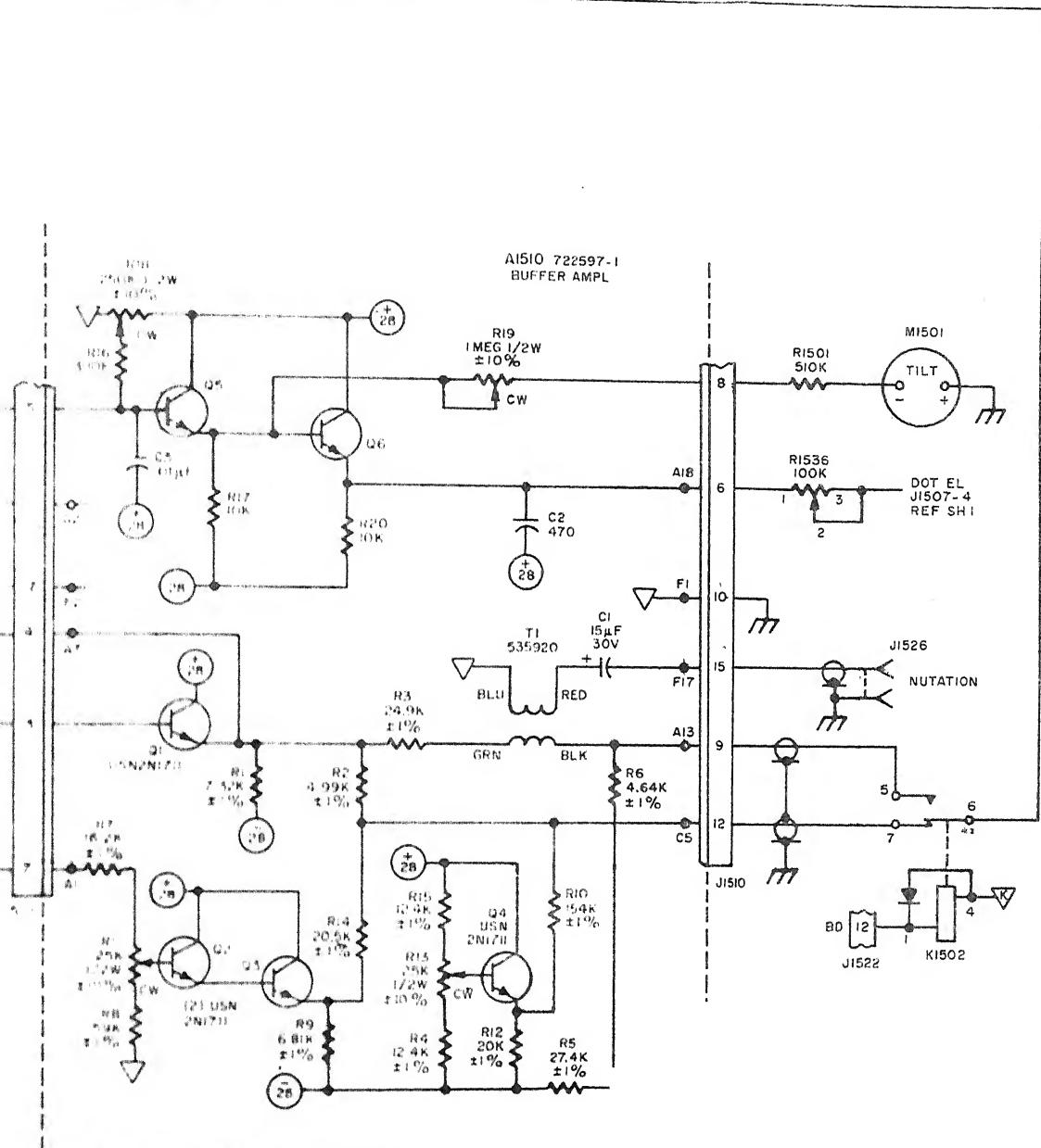
(CIRCLE) FC TRACK ABOVE 3500 YDS

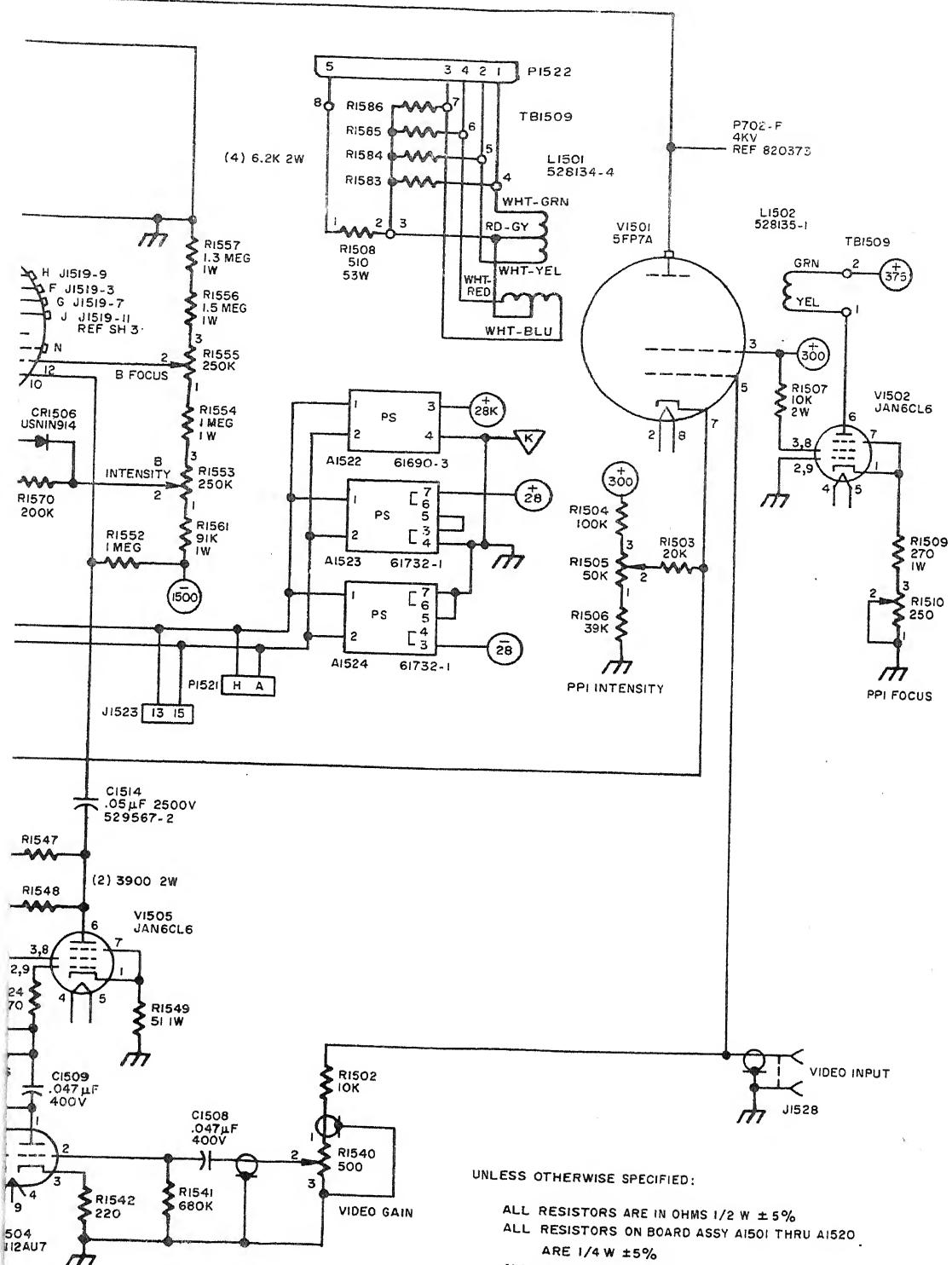


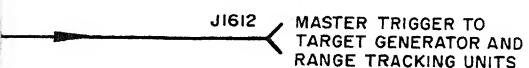
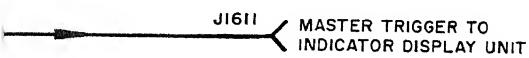
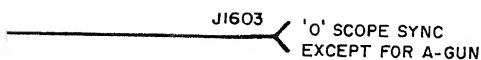
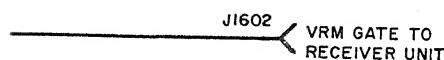
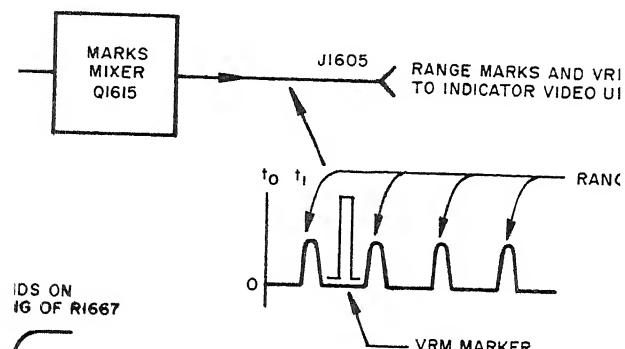
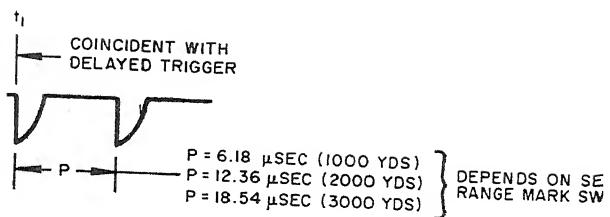
(X) FC TRACK BELOW 3500 YDS

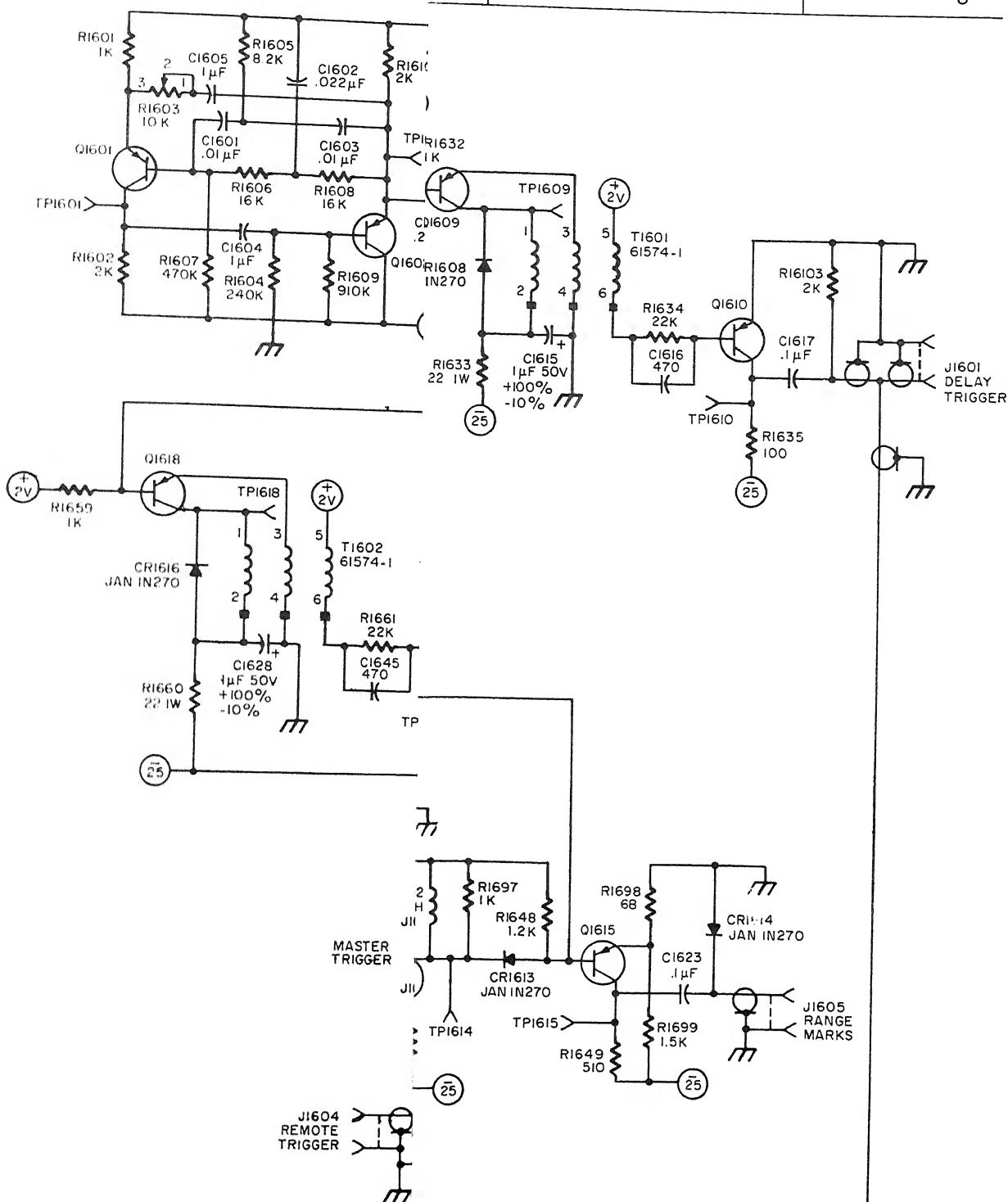
Figure 16. A-Gun Wave Forms and Sequencing









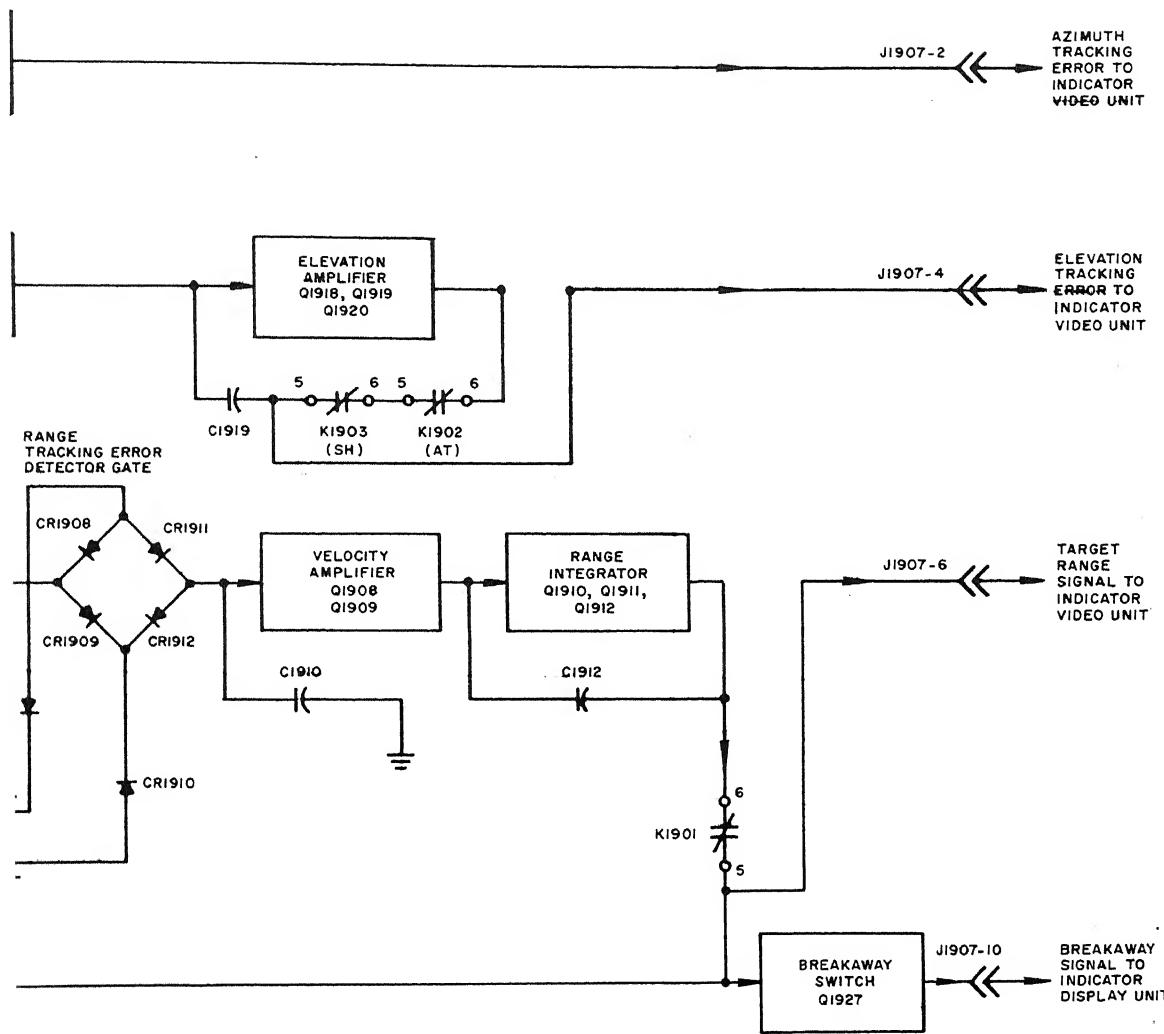


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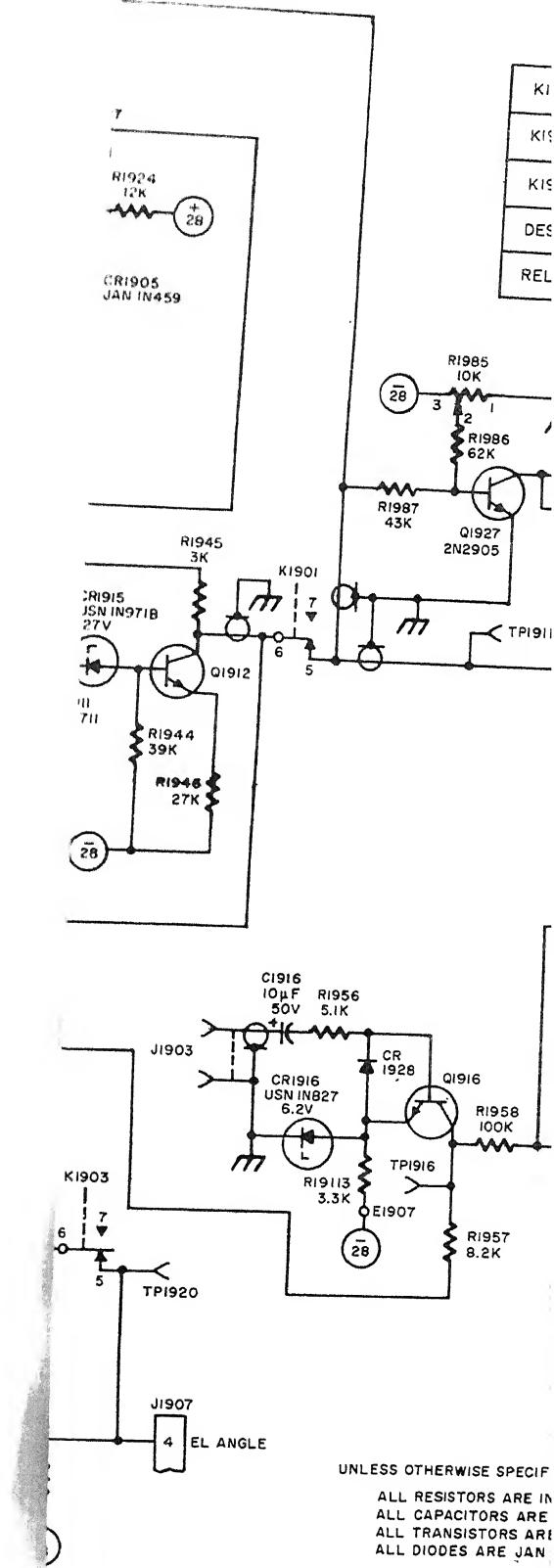
ALL RESISTORS ARE IN OHMS 1/2W ±5%

ALL TRANSISTORS ARE 2N404A

ALL CAPACITORS ARE IN μMF 500V $\pm 5\%$



Range and Angle Tracking Unit 1900, Block Diagram



UNLESS OTHERWISE SPECIFIED

ALL RESISTORS ARE IN
ALL CAPACITORS ARE
ALL TRANSISTORS ARE
ALL DIODES ARE JAN